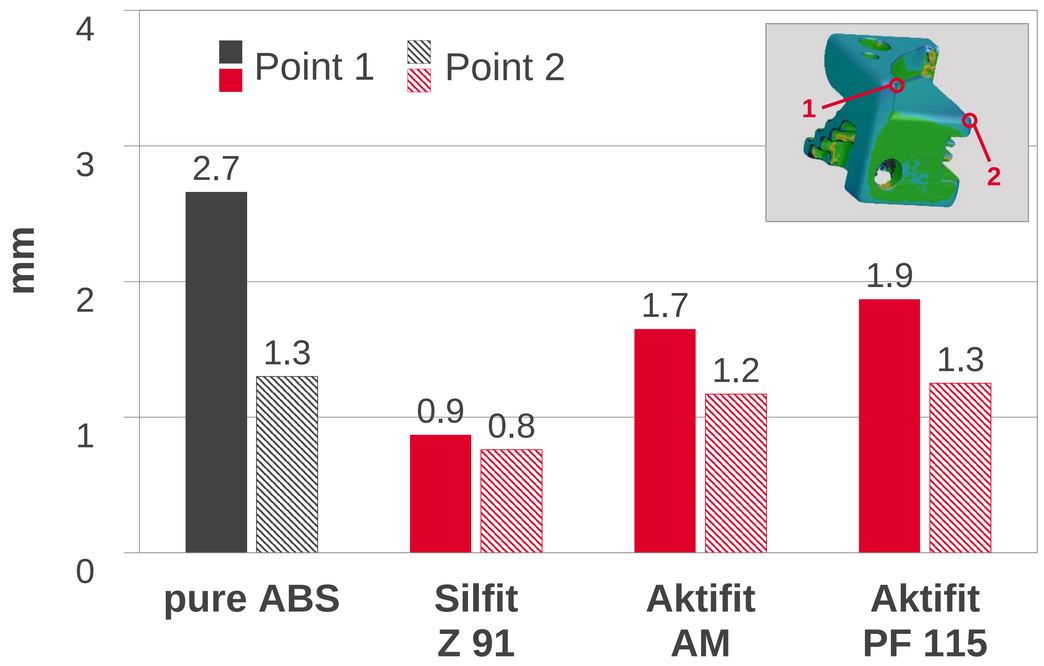
NEUBURG SILICEOUS EARTH IN FFF 3D PRINTING OF ABS

10 wt.% Mineral Additive

RESULTS

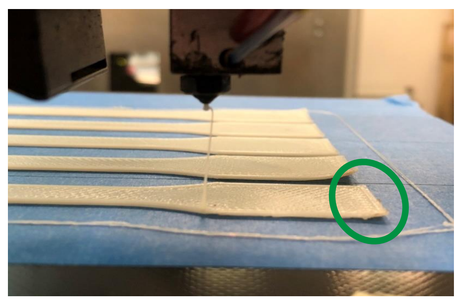
Warping

Print bed temp. 100 °C, Print speed 55 mm/min



Printing of Tensile Specimens

Print bed temp. 100 °C, Print speed 55 mm/min



pure ABS

detaches from print bed
Adjusted parameters necessary !

10 % **Neuburg Siliceous Earth**

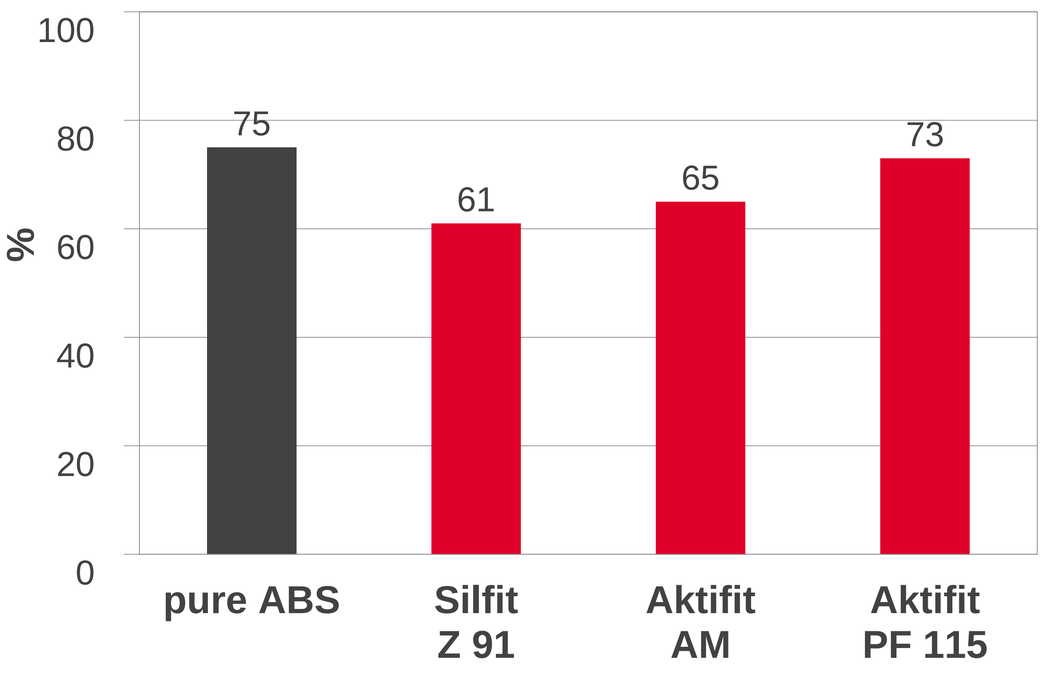
without problems

Adjustment for printing the tensile specimens made of pure ABS:

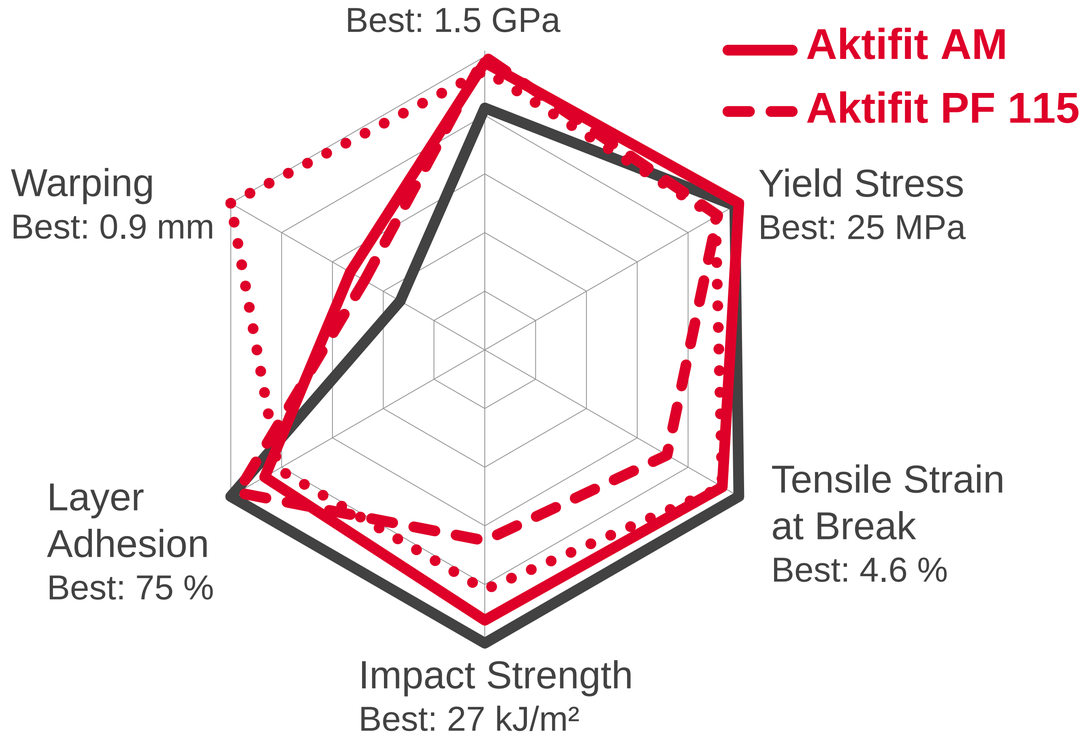
Print bed: 120 °C
Print speed: 45 mm/min

Layer Adhesion

Ratio yield stress Z : XY



Tensile Modulus
Best: 1.5 GPa



SUMMARY

Compared to unfilled ABS polymer, the use of **NEUBURG SILICEOUS EARTH** grades leads to the following properties:

- ✓ Easy handling: low dusting, easily dispersible
- ✓ Reduced warping
- ✓ Very good mechanical properties
- ✓ Comparable layer adhesion
- ✓ Faster print speed
- ✓ Lower printing temperature enables processing even on printers without heated build chamber / print bed

Silfit Z 91	**Aktifit AM**	**Aktifit PF 115**
lowest warping good mechanical properties cost-effective standard product	low warping good mechanical properties higher impact strength	low warping very good layer adhesion

HOFFMANN MINERAL®